AVIFAUNA OF CENTRAL TULE VALLEY, WESTERN BONNEVILLE BASIN

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Fantin (1946) described the flora and fanna of several northern desert biotic communities in Tule Valley, located 80 km west of Delta, Utah, in Millard County of western Bonneville Basin. His study during 1939 (June to September) and 1940 (April to September) included a description of greasewood (Sarcobatus vermiculatus) and pickleweed (Allenvolfea occidentalis) communities. From 1980 through 1991 while inventorving the aquatic habitats of Tule Valley, I noted the avifanna utilizing wetlands, springs, adjacent greasewood and pickleweed communities, and saline flats. This note reports on the avifauna occurring within the two communities and compares the 1980-91 faunal lisiting with that reported previously by Fautin (1946). Comparisons are also made with Fish Springs National Wildlife Refuge, located 50 km north of the Tule Valley springs. This study identifies changes in raptors and songbirds that have occurred over 40 years and notes the differences between natural springs and wetlands and those dedicated to waterfowl management.

DESCRIPTION OF THE TULE VALLEY AQUATIC ENVIRONMENTS

Within the greasewood and pickleweed communities of central Tule Valley are some 25 fissure-fullt springs and associated wetlands. Salme flats covered in part by water from saline scepage springs occur to the east and west of these hs are fault springs. The springs-wetlands vary in aze from 100 m to over 97,000 m². Coyote Springs with a total of 195,000 m². Conduct vites are with a total of 195,000 m². Conduct vites are water than 93,000 mills over the springs of the greater than 93,000 mills over the same vetlands and saline

ponds). Three-cornered bulrush (*Scirpus americanus*) and salt grass (*Distichlis spicata*) are the dominant emergent species, with *Phragmites australis*, *Typha domingensis*, and *Scirpus acutus* occurring in highly localized stands. Tamarisk (*Tamarix ramosissima*) is the only shrub growing within some springs-wetlands but was not noted by Fantin (1946).

METHODS

A total of 36 visits were made to Tule Valley between 1980 and 1991, with 10 visits of two-day durations occurring in 1981. Inventories were conducted during each month (except January) with emphasis during March, May, and June. Birds were inventoried by random encounters, and unidentified species were not pursued. Nomenclature follows that of Peterson (1990).

RESULTS AND DISCUSSION

Table 1 lists the 80 species of birds identified during 1980–91, the months they were encountered, and those species also reported by Fautin (1946). Mallard (scientific names noted in Table 1). Northern Harrier, Horned Lark, Common Raven, and Marsh Wren were encountered year-round and are considered permanent residents. Almost half (31) of the species inventoried during this study were observed two or fewer times (dates included in Table 1) and are considered casual or transient visitors. The single Palm Warbler, a casual bird in Utah (Behle et al. 1985), was identified by its characteristic tail movement as previously observed by the on numerous occasions during annual

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migrations in the Midwest. The saline ponds west of the fissure-fault springs hosted gulls, numerous waterfowl, and shorebirds during migration.

Fifteen species (Great Blue Heron, Turkey Vulture, Sharp-shinned Hawk, Cooper's Hawk, Swainson's Hawk, Red-tailed Hawk, Burrowing Owl, Common Nighthawk, Western Kingbird, Mockingbird, Yellow Northern Warbler, Yellow-breasted Chat, Green-tailed Towhee, Brewer's Sparrow and Lark Bunting) observed by Fantin (1946) were not encountered in this study. Burrowing Owls, while nesting in the adjacent shadscale community, were not observed in the greasewood community. The absence of raptors (in particular the Swainson's Hawk) and the Turkey Vulture ("only occasionally seen, but observed throughout the summer in one community or another," Fautin 1946: 285) could reflect the rangeland predator control programs occurring in Tule Valley since Fautin did his studies. Absence of other species mentioned above could reflect the loss of willows (Salix exigua) which Fautin (1946:257) had noticed as being prevalent. Most of the birds Fautin reported for the greasewood community that were not observed during the present study were considered transients by Fantin (1946).

Over 157 species with 41 permanent residents (those species that can be found in all seasons) and 54 nesting species have been reported for Fish Springs National Wildlife Refuge (U.S. Department of the Interior 1988). This contrasts sharply with the avifauma of Tule

Valley, which consists of 5 permanent residents and a total of 17 summer residents. The larger number of species at Fish Springs National Wildlife Refuge probably reflects the availability of surface water, the presence of trees and buildings, and the proximity of the springs-wetlands to the mountainous Fish Springs Range. Tule Valley springs-wetlands are undeveloped and lack the man-made features. An additional factor that may contribute to the difference in avifauna constituency of Tule Valley and Fish Springs is the contribution over many years of field ornithologists at Fish Springs National Wildlife Refuge.

Two birds, Western Sandpiper and Lincoln's Sparrow, have not been reported in this region in the Latilong study (Walters and Sorenson 1983); and the Lincoln's Sparrow was not reported at Fish Springs (U.S. Department of the Interior 1988). Fish Springs and Tule Valley are in the same Latilong region, and Fish Springs observations overwhelm the Tule Valley observations within the Latilong study.

CONCLUSIONS

A listing of the avifauna for central Tule Valley is reported. Comparisons are made to the avifauna list reported by Fautin (1946) and to the species list prepared by the Fish Springs National Wildlife Refuge. Differences in species are noted and explanations are offered.

TABLE 1. Distribution of birds in the greasewood-wetland community of Tule Valley.

		Month of Year											
	J	F	M	Α	M	J	J	١	S	0	/	D	Specific dates
PODICIPEDIDAE Pied-billed Grebe						,		Υ.					5/5/51: 6/12/52
Podiceps nigricollis Eared Grebe Podilymbus auritus						Χ							6.20/51
Ardeidae American Bittern Botaurus lentiginosus °Great Blue Heron Ardea herodias									X.				9 29/54
Snowy Egret Egretta thula						λ							6,13,52
Black-crowned Night Here Nycticorax nycticorax	011							Υ.		X			5 15/51: 10/20/90
HRESKIORNITHIDAE White-faced Ibis Plegadis chihi								X.					\$/21/\$7; \$/23/91

Table 1. Continued.

	J	F	М	١.	M	J	J	A	S	()	N	D	Specific dates°°
ANATIDAE Canada Goose Branta canadensis			X										3/7/87
Green-winged Teal ∴Anas crecca ≧Mallard		Λ	λ	X	X	X	X	X	ν.	ν.	X	X	4/27/81
Anas platyrlynchos Northern Pintail		.\	X	,	.1		.,		Υ,	,		X	
Anas acuta Cinnamon Teal			X	X	X	X	X	X	X				
Anas cyanoptera American Wigeon			Y.						X				
Anas americana Canvasback Aythya valisineria			Δ										3/22/82
Redhead Aythya americana			\	X		X							
Merganser Mergus sp.			X.										
Ruddy Duck Oxyura jamaicensis			Υ'			X				X			
CATHARTIDAE *Turkey Vulture Cathartes aura													
ACCIPITRIDAE Northern Harrier Circus cyancus Sharp-shinned Hawk Accipiter striatus Cooper's Hawk Accipiter cooperii Swainson's Hawk		X	X	X	X	Λ	X	X	X	X	X	X	
Buteo swainsoui *Red-tailed Hawk Buteo jamaicensis Rough-legged Hawk			\										3/7/81
<i>Buteo lagopus</i> °Golden Eagle			`										3/20/90
Aguila clirysactos American Kestrel									\				9/25/82;9/29/84
Falco sparverius Pranie Falcon Falco mexicanus				\	\								4/4/\$2; 5/11/\$\$
KALLIDAF Vi Zam Rail			V.					Y.		Y.			
P (du lin icola				\				`	λ	,			
T na carolina 1) Coct				\	X	\	\	\	\	λ			
L , ,			\	\	\	\							
RECURVINGS IN Black necked Still Humantopus mexicol								\					\$/21/\$7

Table 1. Continued.

	Month of Year														
	J	F	N	1	1	M	J	J	.A	5	5 ()	N	D	Specific dates**
SCOLOPACIDAE															
Spotted Sandpiper Actitis macularia									Х						\$/21/\$7
Western Sandpiper Calidris mauri				:	ý.										4/20/\$6
Dunlin				,											
Calidris alpina Common Snipe			Υ,	,	. ,										4/20/86
Gallinago gallinago			`	N	,	7			X	X	Z		(
Laridae Gulls <i>Larus sp.</i>			X												
COLUMBIDAE															
°Mourning Dove Zenaida macroura					Ν	. ,		1	Χ	X					
STRIGIDAE															
*Burrowing Owl Athene cunicularia															
CAPRIMULGIDAE															
°Common Nighthawk Chordeiles minor															
APODIDAE White-throated Swift															
Aeronautes saxatalis				X	Z	X									
PICIDAE Northern Flicker											X			X	10/25 (1 12/0//1
Colalptes auratus Tyrannidae											.1			1	10/25/\$1: 12/6/\$1
*Western Kingbird Tyrannus verticalis															
ALAUDIDAE °Horned Lark															
Eremophila alpestris		X	X	Α	X	X	X		X	X	X	\	2	Š.	
HRUNDINIDAE Violet-green Swallow															
Tachycineta thalassina Barn Swallow						X			X						5/5/51; 6/13/52
Hirundo rustica										Χ					9/19/51
Corvidae °Common Raven															
Corvus corax	2	Y.	Λ	X	X	X	X		X	X	X	X	X		
ROGLODYTIDAE Marsh Wren															
Cistothorus palustris		Ĺ	X	1	X	X	X		X	X	Z	X	X		
IUSCICAPIDAE Mountain Bluebird Sialia currucoides											X				\$/2:4 \$1
11MIDAE															
°Northern Mockingbird Mimus polyglottos °Sage Thrasher Oreoscoptes montanus						X	λ	X		X					
OTACILLIDAE.															
American Pipit Anthus rubescens	\		X	X	X										
ANIIDAE															
Loggerhead Shrike Lanius ludovicianus								X		X		X			
THE THEOLIGINALS															

TABLE 1. Continued.

					,	dontl	of Yo	au.					Specific dates°°
	J	F	M	A	M	J	J	A	S	О	N	D	
											-		
STURNIDAE													
Starling		V.	X										2/21/\$1;3/7/\$1
Sturius vulguris													
Emberizhdae													
°Yellow Warbler													
Dendroica petechia													
°Yellow-rumped Warbler Dendroica coronata				X	X				X	X			
Palm Warbler									Λ				9/19/81
Dendroica palmarum													0/10/91
°Common Yellowthroat					X	X	X	X					
Geothlypis trichas													
°Yellow-breasted Chat													
*Community 1 Table 1													
°Green-tailed Towhee Pipilo chlorurus													
American Tree Sparrow											X	X	9/16/80; 12/6/81
Spizella arborea												,	0/10/7/// 12/0/71
*Brewer's Sparrow													
Spizella breweri													
°Vesper Sparrow									X				9/20/\$1
Pooceetes gramineus Lark sparrow													5 /3 // F
Chondestes grammacus					/								5/2/87
°Black-throated Sparrow				X	X	X	Χ						
Amphispiza bilincata													
°Sage Sparrow		X	X	Υ.	Χ	X	Y.						
Amphispiza belli													
*Lark Bunting													
Calamospiza melanocorys Savannalı Sparrow													
Passerculus sandwichensis			X	X	.\	Α	Α	\	X	\	Υ.	X	
Fox Sparrow										Λ			10/20/90
Passèrella iliaca													2.77.20.70
Song Sparrow												\	12/5/81
Melospiza melodia													
Lincoln's Sparrow Melospiza lincolnii				/									4/4/\$1
*White-erowned Sparrow				X					X				
Zonotrichia leucophrys									.\				
Junco				Χ									
Junco sp.													
Red-winged Blackbird			\	X	X	λ	Ζ.						
Agelaius phoeniceus Western Meadowlark			λ										
Sturnella neglecta			.\					X	X	X	X	X	
Yellow headed Blackbird				\	X	X	Χ		\				
Nanthocephalus xanthocep	halu	5											
Brears Blackbird			X						\				
Brown was elections													
Molethrus at ;				\	\	\	\	X	X				
RINGLIDA													
												X	12/6/51
American Gall Month													
American Gall North Carduelis tristis													
American Gall Month													10/25/81

^{*}Identified by Faitin 1946 Dates in right folium are ter tweed.

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